Jorgenson, Craig

From: Lozano, VelRey
Sent: Thursday, August 15, 2013 12:25 PM
To: Jorgenson, Craig
Subject: FW: public comment on Wind River Reservation Pollution Discharge Permits

---

From: Laura Grace Weldon [mailto:laura.euphoria@gmail.com]
Sent: Friday, July 12, 2013 7:04 AM
To: Lozano, VelRey
Subject: public comment on Wind River Reservation Pollution Discharge Permits

Wastewater from hydraulic fracking operations cannot be safely used as drinking water for livestock nor left in surface containment areas for wildlife use. It is contaminated with chemicals that are proven mutagens and carcinogens. I ask that you immediately act to safely sequester fracking wastewater so it cannot be consumed by humans, livestock, or wildlife.

This is an excerpt from an article I wrote about fracking for Wired, relating to the chemical composition of wastewater. http://www.wired.com/geekmom/2012/07/fracking-my-family/

A 2011 Congressional report lists 750 known fracking chemicals in order of most common usage. Here's a partial account of those used in highest amounts.

- methanol
- isopropanol
- crystalline silica
- ethylene glycol monobutyl ether
- hydrotreated light petroleum distillates
- diesel (containing benzene, toluene, ethylbenzene, and xylenes)
- naphthalene
- hydrogen chloride
- toluene
- ethylbenzene
- diethanolamine
- formaldehyde
- sulfuric acid
- thiourea
- benzyl chloride

Some of these chemicals are indeed similar to chemicals used around the home. But a 2011 analysisfound that 25 percent are carcinogens; 37 percent are endocrine disruptors; more than 40 percent can impair the immune system and nervous system; and three-quarters can irritate the eyes and lungs. It's important to remember that some chemicals are toxic in concentrations much less than one part-per-million and the synergistic effect of most chemicals is largely unknown.

The fluid that comes back up also contains ingredients that didn't go in. This means naturally occurring matter such as heavy metals, volatile organic compounds (including benzene, toluene, xylene), radioactive materials (including lead, arsenic, strontium), even acidic microbes. It also means chemical compounds created by the reactions of

chemicals during any stage of the process. Claims of air, ground, and water pollution due to fracking-related activity are often dismissed by industry and government officials because some contaminants are considered “naturally occurring.” And let’s not forget the water’s salinity. Fracking wastewater has two to three times more salt than sea water and more than 180 times the level considered acceptable to drink by the EPA.

The public is informed, aware, and unwilling to let a greedy industry continue to destroy this country. Please listen.

respectfully,

Laura Weldon